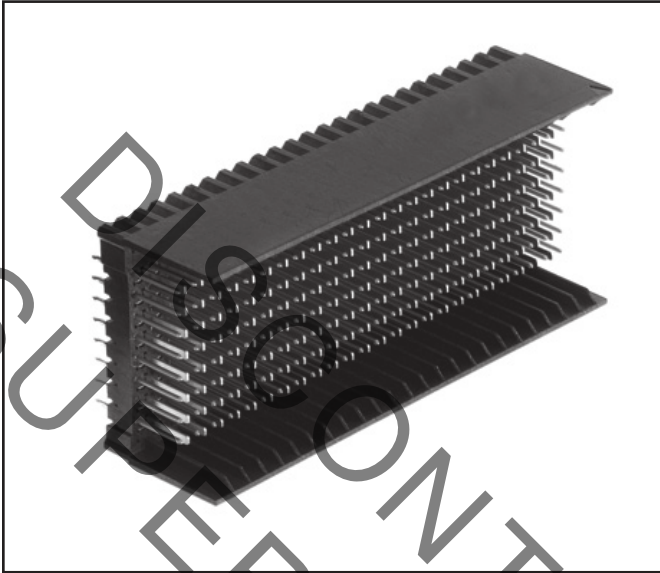


# 3M™ MetPak™ HSHM Press-Fit Header

2 mm Type E, 200 Signal Contacts, 8 Rows, Straight

HSHM Series



- Up to 5 Gb/s data rates
- Low crosstalk at high frequencies
- 50/100  $\Omega$  (single-ended /differential) impedance
- Modular/scalable format IEC 61076-4-101
- 101 mated lines per linear inch
- End-to-end stackable with 8 row 3M™ MetPak™ CP2, HM and HSHM headers
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3mconnector.com](http://www.3mconnector.com) for compliance information

Date Modified: November 10, 2010

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## Physical

### Insulation:

Material: High Temperature Thermoplastic (LCP)  
Flammability: UL 94V-0

### Contact:

Material: Copper Alloy  
Plating: See Ordering Information

## Performance

### Mechanical:

Normal Force (Nominal): 0.57 N [58 g] Signal, 0.74 N [75 g] Shield  
Engagement Force (Nominal): 0.32 N [33 g] Signal, 0.22 N [22 g] Shield  
Separation Force (Nominal): 0.20 N [20 g] Signal, 0.20 N [20 g] Shield  
Wipe (Nominal, Shortest Contact): 2.67 mm [0.105 in] Signal, 1.57 mm [0.062 in] Shield  
Mate/Unmate Cycles: 250  
Application: This module is not suitable for stand-alone use. (Refer to IEC-61076-4-101)

### Electrical:

Data Rate: 5 Gb/s  
Characteristic Impedance: 50  $\Omega$  Single-ended, 100  $\Omega$  Differential  
Current Rating (Fully Loaded): 1 A @ 70° C Signal  
Insulation Resistance: 10<sup>4</sup> M $\Omega$  @ 100 V<sub>DC</sub>  
Withstanding Voltage: 750 V<sub>rms</sub>

## Environmental

Temperature Rating: -55° C to 125° C

UL File No.: E68080

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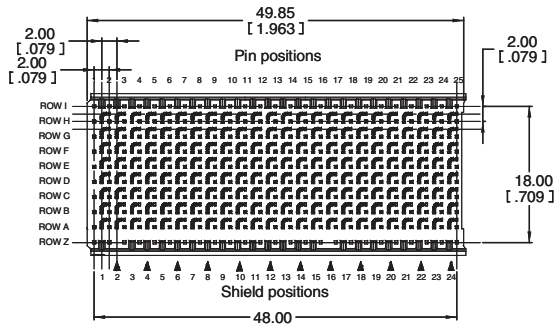
HSHM Series



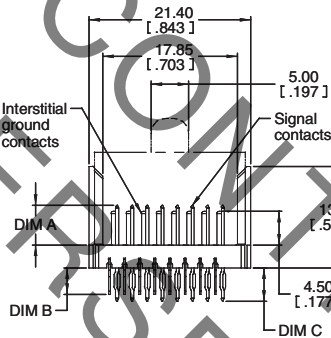
mm  
(Inch)

Tolerance Unless Noted		
	0	0.0
mm	±3	±0.3
		±0.13

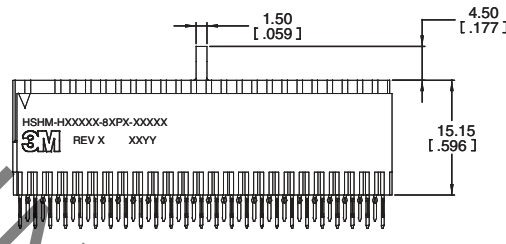
( ) Dimensions used for Reference Only



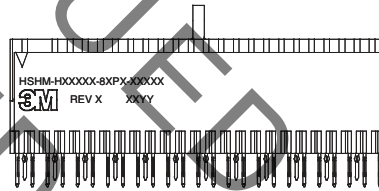
▲ denotes shield column (tail only) omitted for the row differential pair part



DIM A = Pin mating length  
DIM B = Shield tail length  
DIM C = Pin tail length



Coaxial, column differential and stripline configuration shown with protective caps\*



Row differential configuration shown with protective caps\*

\* Caps to be removed after press-fit installation process

## Ordering Information

**HSHM-H200EX-8CPX-XXXXX** (rows I and Z not loaded)

High Speed Option:

- 4 = Coaxial, column differential and stripline (75 Ω) applications
- 5 = Row differential applications

Tail Length:

- 1 = 4.4 mm pin and 3.5 mm shield
- 2 = 2 mm pin and 2 mm shield

Plating μm [ μ" ]:

- TG30 = 0.76 [30] Min. Au Contact Area  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Standard Option
- TG30L = 0.76 [30] Min. Au Contact Area, Lubricated  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Typically higher make order quantities as compared to TG30.
- TG50 = 1.27 [50] Min. Au Contact Area, Lubricated  
2.54 [100] Min. SnPb Terminal Area (RIA C2 & E2 apply)  
1.27 [50] Min. Ni All over  
Non-Standard Option (Available with longer lead times and higher make order quantities, MOQ)

Standard Configuration

DIM A = 5.3 mm for rows A through H

For non--standard configurations contact sales representative

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**3M**

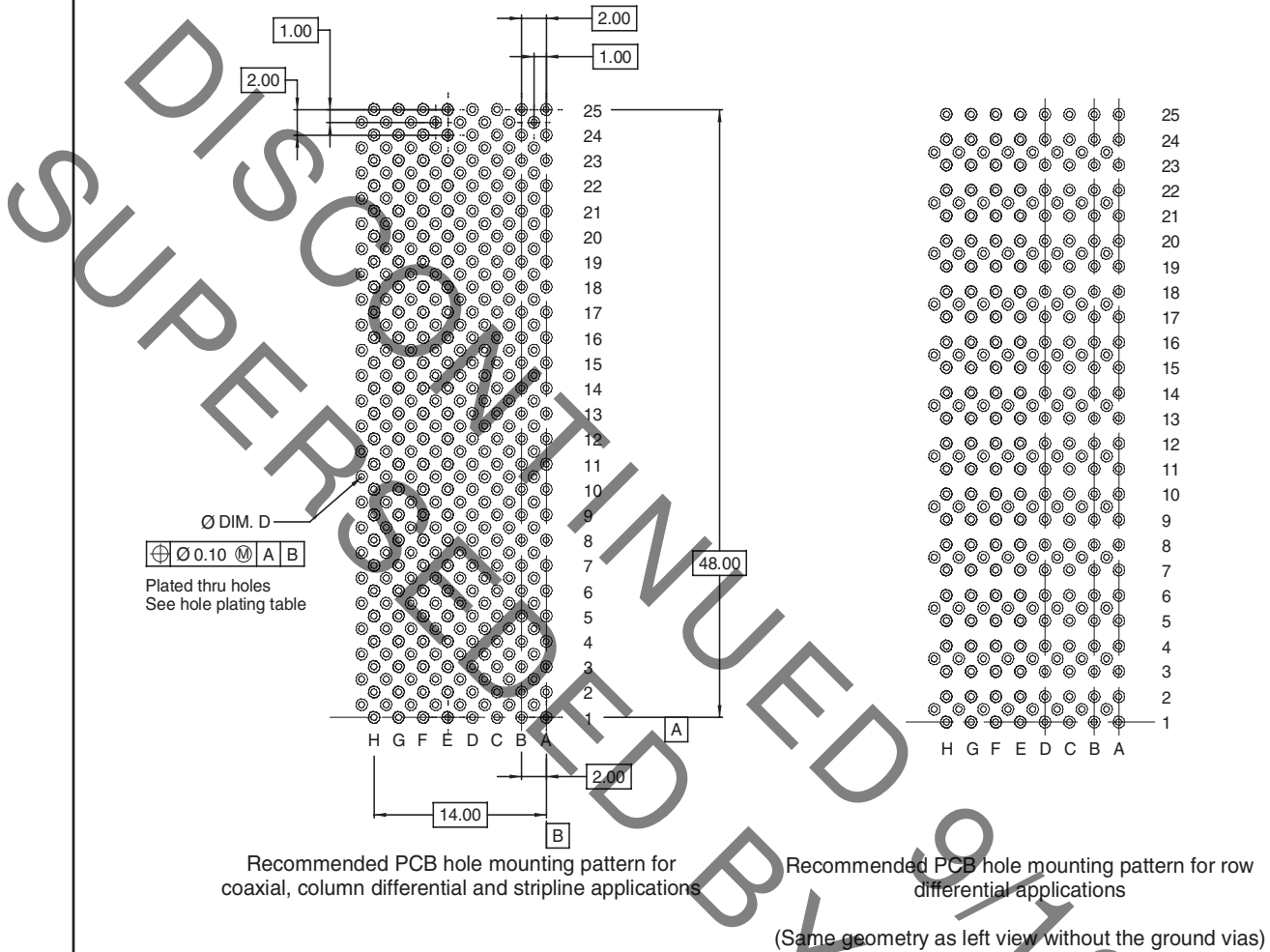
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

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**800-225-5373**

# 3M™ MetPak™ HSHM Press-Fit Header

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HSHM Series



Hole Plating Table mm [in]			
Finished Hole Dia. "D"	Cu. Thickness	SnPb Thickness	Drilled Hole Dia.
0.457 - 0.559 [.0180 - .0220]	0.025 - 0.045 [.0010 - .0018]	0.008 - 0.018 [.0003 - .0007]	0.584 - 0.625 [.0230 - .0246]

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